

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF TRAFFIC SIGNALS AT THE INTERSECTION OF MD 228 AND MD 229 IN CHARLES COUNTY TO CHANGE THE EXISTING EXCLUSIVE/PERMISSIVE LEFT TURN TO EXCLUSIVE LEFT TURN PHASE FOR THE WESTBOUND MD 228 APPROACH. ALL SIGNALS WILL BE UPGRADED TO LED SIGNALS. ADDITIONALLY, DETECTION LOOPS ON MD 229 AND THE LEFT TURN BAY OF WB MD 228 ARE TO BE REMOVED AND REPLACED WITH VIDEO DETECTION. THE EXISTING ADVANCED DETECTION ON EB AND WB MD 228 IS TO BE REPLACED WITH NON-INVASIVE PROBES. MD 228 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE LEFT TURN PHASE FOR THE WESTBOUND MD 228 APPROACH. MD 228 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. TURN MOVEMENTS FOR MD 229 WILL RUN AFTER ALL PHASES FOR MD 228. THERE ARE NO PEDESTRIAN PHASES FOR THE INTERSECTION.

EQUIPMENT LIST FOR CONTRACT NO. XX4395185

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM	QUANTITY	UNIT	DESCRIPTION
NO EQUIPMENT TO BE PROVIDED			

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
8001	9	EA	12 INCH LED SIGNAL HEAD SECTION
8026	4	EA	NONINVASIVE DETECTOR (ANY LENGTH)
8027	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8032	2	EA	VIDEO DETECTION CAMERA AND CABLE
8041	180	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8043	240	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8045	27	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	420	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8051	4	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8061	100	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. EQUIPMENT TO BE REMOVED.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. ALL OTHER EXISTING SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL.

CONTACTS

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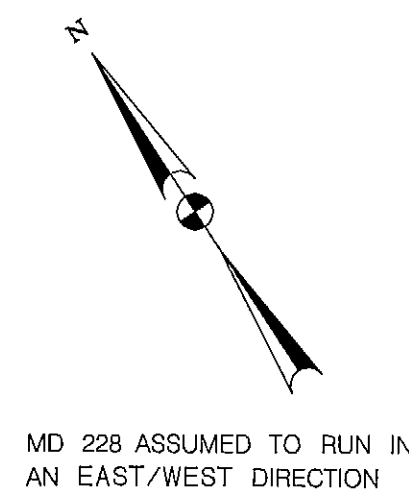
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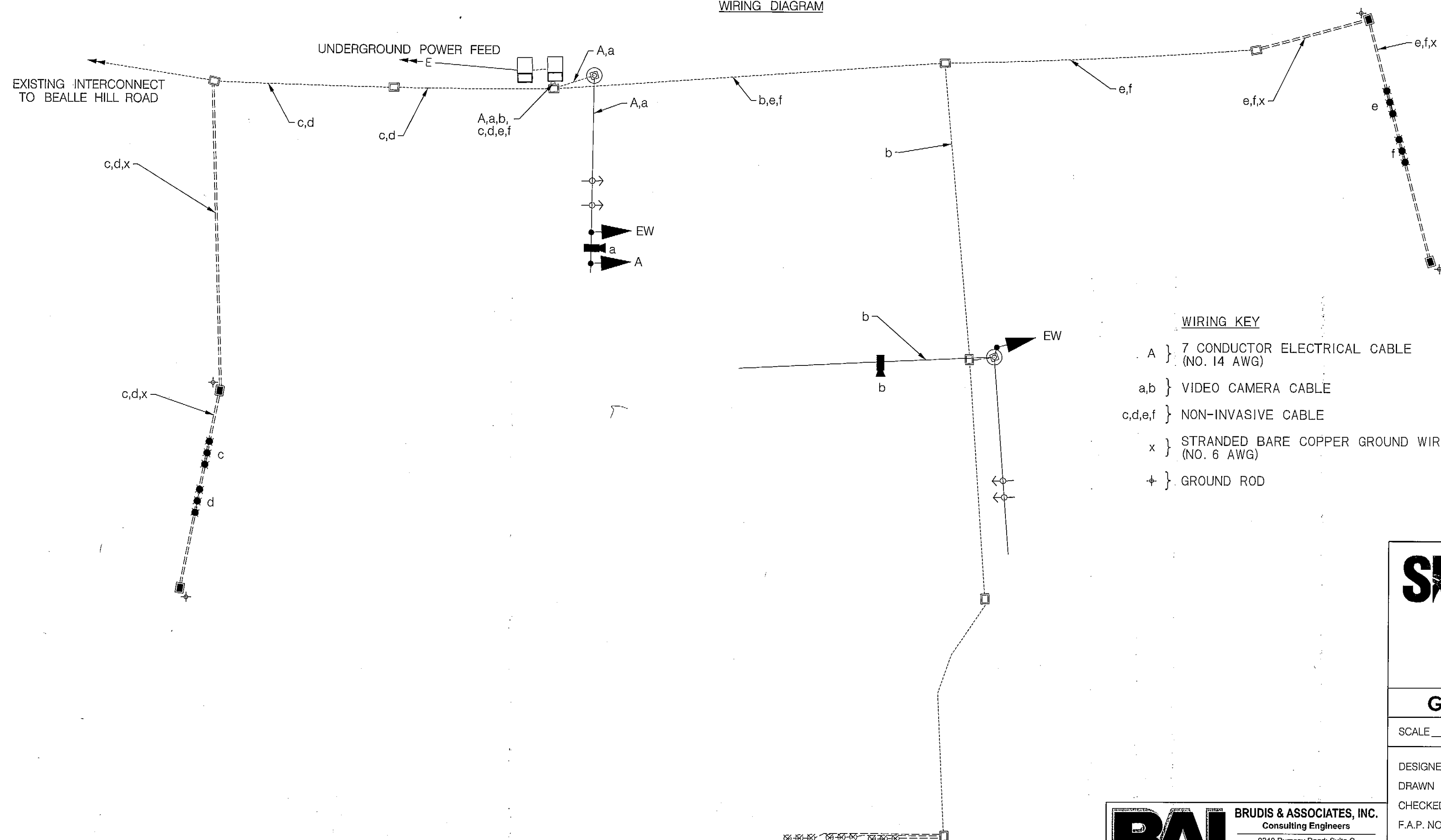
PHASE CHART

	1	2	3	4	5	6	7	8	
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
	(R)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	
PHASE 2 AND 5	R	R	←G	←G	G	G	R	R	←
5 CHANGE	R	R	←Y	←Y	G	G	R	R	←
PHASE 2 AND 6	G	G	←R	←R	G	G	R	R	←
2 AND 6 CHANGE	Y	Y	←R	←R	Y	Y	R	R	←
PHASE 4	R	R	←R	←R	R	R	G	G	←
4 CHANGE	R	R	←R	←R	R	R	Y	Y	←
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	←



MD 228 ASSUMED TO RUN IN AN EAST/WEST DIRECTION

WIRING DIAGRAM



WIRING KEY

- A } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- a,b } VIDEO CAMERA CABLE
- c,d,e,f } NON-INVASIVE CABLE
- x } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- + } GROUND ROD

TOD NO: XY139-08
SHA NO: CH236851
MD 228 @ MD 229



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 228 (BEALLE HILL ROAD) AND
MD 229 (BENSVILLE ROAD)
WALDORF, MD

GENERAL INFORMATION PLAN SHEET

SCALE NONE ADVERTISED DATE 04/2013 CONTRACT NO. XY1395185

DESIGNED BY JC COUNTY CHARLES

DRAWN BY JC LOGMILE 05022800.17

CHECKED BY RM TMS NO. L815

F.A.P. NO. TOD NO.

TS NO. 3553-B DRAWING GI-1 OF 1 SHEET NO. 2 OF 2



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PLOTTED: Tuesday, March 19, 2013 AT 02:11 PM
FILE: P:\09-002 TEDD\Task 115 MD 228 @ MD 229\Drawings\CADD\Working\p5g-N001_MD228@MD229.dgn